

Improving Spectrum Management through Market Based and other Incentive Mechanisms

The New Zealand Example



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Overview

- **The Old method (pre 1989)**
- **The NEW Regime of Tradable property rights.**
- **Fees**
- **Observations**



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The Old Way

- **Wireless Telegraphy Act 1903**
- **Authorized by Government**
- **Administrative Licensing**
- **Granted on Payment of a fee**
- **Apparatus License Regime**



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The New Regime

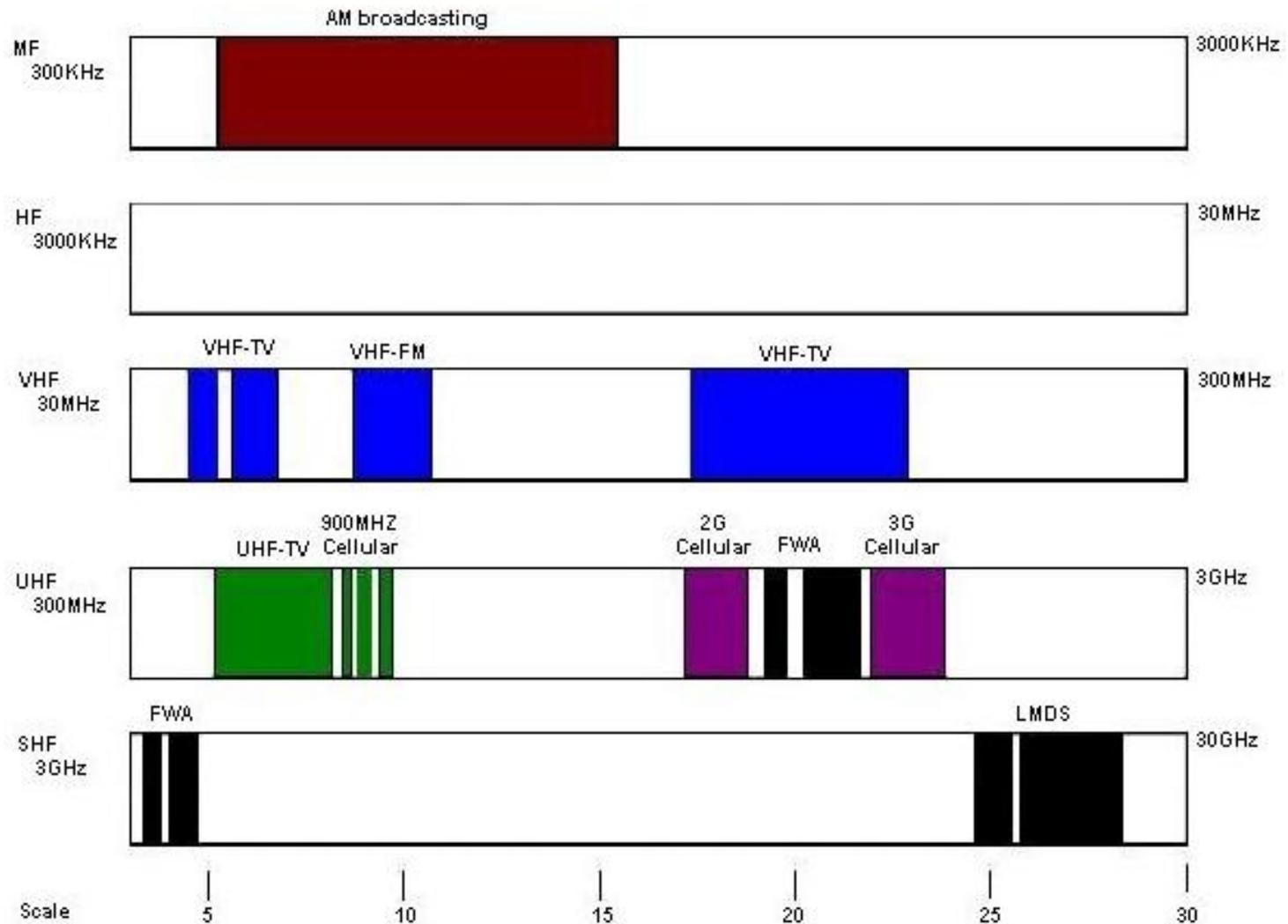
- **Radio Communications Act 1989**
- **Radio Communications Regulations 2001**
- **Market based Allocation method**
- **Tradable Long Term Leases –up to 20 years**
- **Management Rights and Spectrum Licenses**
- **Originally disposed tender now by Auction**
- **Maintained the Apparatus License regime**



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SPECTRUM ALLOCATED UNDER MANAGEMENT RIGHTS





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Fees

Applied to all spectrum Users (incl Govt agencies)

Only recover the cost of managing the spectrum in NZ (RSM operating costs)

Mixture of Apparatus and Band license fees

GURLs do not attract fees

Govt provides cost of running Auctions. Proceeds returned to Govt (not retained by RSM)

Contained in Schedule 6 to the NZ Regulations



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Formulaic Approach

$$\text{Fee} = \{[(b*s*)*e*a*g]*t\}*k$$

Where

a = Transmitter power in dBW eirp

b = bandwidth in MHz

g = locations of transmitter (Non metro=1; Metro=3;

All NZ=10

e = exclusivity (set to 1 initially)

s = location within the spectrum

t = license category

k= normalizing constant (formula adjustment factor to meet revenue requirement



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NZDF Observations

- MRR does not promote sharing
- Difficulty in coordinating wide band requirements where there are a number of MR holders in the band/s required.
- MR holders still consider the Govt responsible for some aspects of management
- In NZ the expectation of Spectrum Efficiency has not been realized
- Can hinder negotiation at WRCs
- Market Based mechanisms suitable for *some* frequency bands but not *all*



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Thank You

www.med.govt.nz/rsm



what huh ??????,
oh NZ Regulation Stuff,
WHAT THE #*!! WAS
THAT ALL ABOUT?

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